

Partial Translation of Japanese Unexamined Patent Publication
No.1997-140378

[Claim 1] A PQQ-dependent glucose dehydrogenase composition
5 comprising (1) calcium ion or calcium salt and (2) amino acids
selected from the group consisting of glutamic acid, glutamine
and lysine.

[Claim 4] The PQQ-dependent glucose dehydrogenase composition
10 according to claim 1, further comprising serum albumin.

[0009]

[Means for solving the Problem] The present inventors conducted
extensive research concerning a stabilizer for PQQ-dependent
15 glucose dehydrogenase and found that high stabilizing effect can
be achieved by the combination use of calcium ion and specific
amino acid, thus to accomplish the present invention.

[0031] Example 4

20 PQQ-dependent glucose dehydrogenase (5 U/ml) used in Example 1,
1-methoxy-5-phenazolum methylsulfate (29.5 mM), MTT (0.6 mM),
NaN₃ (0.2 mM), CaCl₂ (10 mM), glutamine (0.05 %), glutamic acid
(0.05 %), lysine (0.05 %), BSA (0.2 %) and PIPES buffer (pH 7.5,
50 mM) were mixed to prepare a reagent composition for glucose
25 measurement. The reagent composition was used to measure glucose
concentration in blood serum. The result is shown in Figure 2.
The absorbance rises linearly with the increase of glucose
concentration.